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Fig. 1A

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Title: Stem Cell Maintenance Factor Materials and Methods Docket No. 28110/35905A Page 2 of 9 Fig. 1B

160 - A N LL piwi. PRO hiwi. PRO hiwi. PRO - T D El ciwi2. PRO V[T] V El ciwi1. PRO V E V El ambergine. PRO hiwi. Hy. PRO	1 C Majority 200 210 210 21 C Dial. PRO 21 C DIAL. PRO 22 DIAL. PRO 33 DIAL. PRO 34 DIAL. PRO 35 DIAL. PRO 36 DIAL. PRO 36 DIAL. PRO 37 DIAL. PRO 38	L V G R N Y Majority 240 L V G R N I Divi. PRO hwi. PRO O L G R N Y ciwil. PRO L V S R N Y ciwil. PRO L V S R N Y ciwil. PRO hwi. PRO hwi. PRO
130 W R L I V H Y H V E F E P I S I E N P R V N M G V L S N H L - A N I L L - A N I L L - A N I L L - A N I L L - A N I L L - A N I L L - A N I L L - A N I L L - A N I L L - A N I L L - A N I L L - A N I L L - A N I L L - A N I L L - A N I L L L A N I L L L A N I L L L L A N I L L L L A N I L L L L A N I L L L L A N I L L L L L L L L L L L L L L L L L L	1	Z30 A KG L N L E R D A L O L T R D A M L T R D A M L T R D A L O L T R D A M L T R D A M L T R D A M L T R D A M L T R D A M L T R D A M L T R D A M L T R D A M L T R D A M L T R D A M L T R D A M L T R D A M L T R D A M L T R D A M L T R D A M L T R D T R D A M L T R D
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Title: Stem Cell Maintenance Factor Materials and Methods Docket No. 28110/35905A Page 3 of 9 Fig. 1C

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Title: Stem Cell Maintenance Factor Materials and Methods Docket No. 28110/35905A Page 4 of 9 Fig. 1D

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Title: Stem Cell Maintenance Factor Materials and Methods Docket No. 28110/35905A Page 5 of 9 Fig. 1E

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Title: Stem Cell Maintenance Factor Materials and Methods Docket No. 28110/35905A Page 6 of 9 Fig. 1F

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640	1 A 1 O L N C R L 1 A L O M N C R M 1 V L O M 1 C R T 1 V L O M 1 C R T V V 1 O M N A R R 1 A M O M A C R R	GKSVGACVAS-T	Y G A L I A S M D I A G F V A S - I V G A C V S T - T V G A C V S T - T Y G A F V A T M D V G C V A S - V	LRQY-DSND	L R Q Y = Q H E H L R A Y V D S C N L R Q Y Y D S N D L R S Y Y D S N D L R S Y = Y X Y N L R Y Y Y D S N H L R Y Y Y Y N S N H
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FIG. 11

Title: Stem Cell Maintenance Factor Materials and Methods Docket No. 28110/35905A Page 7 of 9 Fig. 1G

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Title: Stem Cell Maintenance Factor Materials and Methods Docket No. 28110/35905A Page 8 of 9 Fig. 1H

850 860 870	088	A V C Q Y piwi.PRO A P C Q Y hiwi.PRO A P C Q Y chwiz.PRO A P C Q Y chwiz.PRO A P C Q Y chwii.PRO A V C H Y aubergine.PRO hiwi_HY.PRO	Majozity piwi. PRO hiwi. PRO civil. PRO civil. PRO aubergine. PRO	hiwi_Hy.PRO
	098	778 N V I Y D N S S M G L S P P E K M G K L T Y K M G H L Y Y N W S G T T R V P A V C G Y D M M L P RO 457 N V I Y D N S G L K P D H I J G R L T Y K L C H I J Y Y N W P G V I R V P A P C C Q Y D M M L P RO 38 N I I I H D D T G L P P A P G L A F R L L L L L Y Y N W G G T V R V P A P C C Q Y C MALL P RO 656 N I I I H D D T G L Q P D K H Q Q L A F K L C L L Y Y N W G G T V R V P A P C C Q Y C MAIL P RO 800 N V I S D N M G L L P R V P N W G C T I R V P A V C H Y A M D C C M I L P RO 800 N V I S D N M G L A R V P A P C G Y C M L P P RO 800 N V I S D N M G L P R V P A V C H Y S M M G C T I R V P A V C H Y M M M M M M M M M M M M M M M M M M	A H K L A F L V A Q S L H D D P N G X L R D K L Y F L 890 900 918 A K K L A L L V G T N L H S I P Q N A L E K K F Y Y L 497 A H K L A F L Y G O S I H R E P N L S L E R K F Y Y L 798 A H K L A F L Y A Q S L H D D A N G L R D K L F F L 896 A H K L A F L Y A Q S L H D D A N G L R D K L F F L 890 A H K L A F L Y A D S L H D D A N G C L R D K L F F L 890 A H K L A F L Y A D S I H D A D A N G L R D K L F F L 890 A H K L A F L Y A D S I H D A D A N G L R D K L F F L	186 Decoration 'Decoration #1': Box residues that match the Consensus exactly.

Decoration 'Decoration #2': Shade (with black at 10% fill) residues that match hiw! Hy.PRO exactly.

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SEQUENCE ALIGNMENT

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60 266	120 326	180	
SEQ ID NO:2 1 SIKKYLS_CPVPSQCV_ARTLNKQGMMMSIATKIAMQMTCKLGGELWAVEIPLKSLMVV 60 SEQ ID NO:9 207 SIKKYLS <u>SD</u> CPVPSQCV <u>L</u> ARTLNKQGMMMSIATKIAMQMTCKLGGELWAVEIPLKSLMVV 266	SEQ ID NO:2 61 GIDVCKDALSKDVMVVGCVASVNPRITRWFSRCILQRIMTDVADCLKVFMTGALNKWYKY 120 SEQ ID NO:9 267 GIDVCKDALSKDVMVVGCVASVNPRITRWFSRCILQRIMTDVADCLKVFMTGALNKWYKY 326	SEQ ID NO:2 121 NHDLPARIIVYRAGVGDGQLKTLLEXEVPQLLSSVAESSSNTSSRLSVIVVRKKCMPRFF 180 SEQ ID NO:9 327 NHDLPARIIVYRAGVGDGQLKTLLEXEVPQLLSSVAESSSNTSSRLSVIVVRKKCMPRFF 386	SEQ ID NO:2 181 TEMNRT 186 SEQ ID NO:9 387 TEMNRT 392
1 20	61	327	181 387
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2 FIGURE

(886)

183/186

Score = 942 (336.7 bits), Expect = 3.0e-100, p Identities = 183/186 (98%), Positives = 183/186